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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/556,308	04/24/2000	Hiroaki Kubo	018656-124	7095

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EXAMINER

JERABEK, KELLY L

ART UNIT	PAPER NUMBER
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2612

DATE MAILED: 06/01/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/556,308

Applicant(s)

KUBO, HIROAKI

Examiner

Kelly L. Jerabek

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 March 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-8 and 11 is/are rejected.
- 7) ☐ Claim(s) 9-10, and 12-15 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

Applicant's arguments filed 3/15/2004 have been fully considered but they are not persuasive.

Response to Remarks:

Claim 1, as amended, recites that the plurality of light-measuring elements detect the brightness of an image sensing surface of the image sensor at different angles relative to the surface. Applicant contends (Amendment, page 9) regarding claim 1 as amended that the Takagi reference fails to render claim 1, as amended, unpatentable. The Examiner respectfully disagrees. Takagi discloses a photometric apparatus for a camera (fig. 19). The disclosed photometric apparatus includes an optical system through which light from a photographic subject passes (fig. 13: LE), and a light emission system for illuminating the photographic subject (fig. 19: 16, 29). In addition the photometric apparatus includes a plurality of light measuring elements (fig. 11A: 18a-18e). These light measuring elements sense light that is reflected by the subject and passes through the photographic system (col. 7, lines 2-32). In addition, each of the plurality of light measuring elements (18a-18e) receives the light reflected from the image-sensing surface (FI) at different angles relative to the image-sensing surface (FI)

(col. 7, lines 25-30; fig. 11a). The photometric apparatus also includes a controller that controls the light emission system based on the light received by the light measuring elements (col. 10, lines 43-58; fig. 19: 26, 29). However, Takagi discloses that light passing through the optical system is received by a photographic film and not by an image sensor.

Yahav discloses a camera with through-the-lens lighting (fig. 1A). The camera includes a photosensitive surface (fig. 1A: 22). Yahav states that the photosensitive surface (fig. 1A: 22) may comprise photographic film or a CCD (col. 10, lines 56-60). Using a CCD as a photosensitive surface instead of photographic film is advantageous because it allows images to be captured electronically. Therefore, it would have been obvious for one skilled in the art to have been motivated to include an image sensor such as a CCD as taught in Yahav in the photometric apparatus disclosed by Takagi. Doing so would provide a means for controlling the flash emission of a camera using an alternate photosensitive surface such as a CCD (Yahav: col. 10, lines 56-60).

Applicant contends (Amendment, pages 9 and 10) regarding claim 8 that the Takagi reference does not disclose or suggest that the light measuring devices sense flare light within the space between the optical system and the image sensor. The Examiner respectfully disagrees. The photometric apparatus disclosed by Takagi includes a plurality of light measuring elements (fig. 11A: 18a-18e). These light measuring elements sense light that is reflected by the subject and passes through the photographic system (col. 7, lines 2-32). Furthermore, the light measuring elements

(fig. 2: 2) disclosed by Takagi are located in a space between the optical system (fig. 2: LE) and the photographic film (fig. 2: FI). See also (col. 2, lines 8-16). The light that is sensed by the light measuring elements (18a-18e) is read as flare light because it is light that is reflected off of the image sensor (FI) (col. 7, lines 2-32; fig. 11a). The dictionary defines the word flare as: light resulting from reflection or an effect of this light. Therefore, the light detected by the light measuring elements (18a-18e) is flare light.

Claim Rejections - 35 USC § 103

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 1, 2, and 5-8 rejected under 35 U.S.C. 103(a) as being unpatentable over Takagi US 5,400,112 in view of Yahav US 6,445,884.

Re claim 1, Takagi discloses a photometric apparatus for a camera (fig. 19). The disclosed photometric apparatus includes an optical system through which light from a photographic subject passes (fig. 13: LE), and a light emission system for illuminating the photographic subject (fig. 19: 16, 29). In addition the photometric apparatus includes a plurality of light measuring elements (fig. 11A: 18a-18e). These light measuring elements sense light that is reflected by the subject and passes through the

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photographic system (col. 7, lines 2-32). In addition, each of the plurality of light measuring elements (18a-18e) receives the light reflected from the image-sensing surface (FI) at different angles relative to the image-sensing surface (FI) (col. 7, lines 25-30; fig. 11a). The photometric apparatus also includes a controller that controls the light emission system based on the light received by the light measuring elements (col. 10, lines 43-58; fig. 19: 26, 29). However, Takagi discloses that light passing through the optical system is received by a photographic film and not by an image sensor.

Yahav discloses a camera with through-the-lens lighting (fig. 1A). The camera includes a photosensitive surface (fig. 1A: 22). Yahav states that the photosensitive surface (fig. 1A: 22) may comprise photographic film or a CCD (col. 10, lines 56-60). Using a CCD as a photosensitive surface instead of photographic film is advantageous because it allows images to be captured electronically. Therefore, it would have been obvious for one skilled in the art to have been motivated to include an image sensor such as a CCD as taught in Yahav in the photometric apparatus disclosed by Takagi. Doing so would provide a means for controlling the flash emission of a camera using an alternate photosensitive surface such as a CCD (Yahav: col. 10, lines 56-60).

Re claim 2, the photometric apparatus disclosed by Takagi includes a weighting value calculation means (fig. 19: 26) and a flash controller (fig. 19: 29). The weighting value calculation means (26) sets an integration amount for each light measuring element (col. 9, lines 60-67). Next, photometric regions at which the reflection rate distribution rate is very high or very low are extracted (col. 10, lines 1-23). Finally, the

main flashing by the flash apparatus (fig. 19: 16) is carried out based on the results of the weighting light adjustment circuit (fig. 19: 28). See also (col. 10, lines 24-46).

Re claim 5, see claim 2. The voltage (E_n) corresponding to the weighting values are input into the weighting light adjustment circuit (fig. 19: 28) and cause the flashing apparatus (fig. 19: 16) to flash (col. 10, lines 43-46). The weighting value is the same as an average of all of the selected elements.

Re claim 6, the light measuring elements (fig. 2: 2) disclosed by Takagi are located in a space between the optical system (fig. 2: LE) and the photographic film (fig. 2: FI). See also (col. 2, lines 8-16). However, Takagi discloses that light passing through the optical system is received by photographic film and not an image sensor.

Yahav discloses a camera with through-the-lens lighting (fig. 1A). The camera includes a photosensitive surface (fig. 1A: 22). Yahav states that the photosensitive surface (fig. 1A: 22) may comprise photographic film or a CCD (col. 10, lines 56-60). Using a CCD as a photosensitive surface instead of photographic film is advantageous because it allows images to be captured electronically. For this reason, it would have been obvious to include an image sensor such as a CCD as taught in Yahav in the photometric apparatus disclosed by Takagi. Doing so would provide a means for controlling the flash emission of a camera using an alternate photosensitive surface such as a CCD (Yahav: col. 10, lines 56-60).

Re claim 7, see claim 6. The light measuring elements disclosed by Takagi sense light that is reflected at the film surface (fig. 2: FI). See also (col. 2, lines 8-16).

Re claim 8, Takagi discloses a photometric apparatus for a camera (fig. 19). The disclosed photometric apparatus includes an optical system through which light from a photographic subject passes (fig. 13: LE), and a light emission system for illuminating the photographic subject (fig. 19: 16, 29). In addition the photometric apparatus includes a plurality of light measuring elements (fig. 11A: 18a-18e). These light measuring elements sense light that is reflected by the subject and passes through the photographic system (col. 7, lines 2-32). Furthermore, the light measuring elements (fig. 2: 2) disclosed by Takagi are located in a space between the optical system (fig. 2: LE) and the photographic film (fig. 2: FI). See also (col. 2, lines 8-16). The light that is sensed by the light measuring elements (18a-18e) is read as flare light because it is light that is reflected off of the image sensor (FI) (col. 7, lines 2-32; fig. 11a). The dictionary defines the word flare as: light resulting from reflection or an effect of this light. Therefore, the light detected by the light measuring elements (18a-18e) is flare light. The photometric apparatus also includes a controller that controls the light emission system based on the light received by the light measuring elements (col. 10, lines 43-58; fig. 19: 26, 29). However, Takagi discloses that light passing through the optical system is received photographic film and not by an image sensor.

Yahav discloses a camera with through-the-lens lighting (fig. 1A). The camera includes a photosensitive surface (fig. 1A: 22). Yahav states that the photosensitive

surface (fig. 1A: 22) may comprise photographic film or a CCD (col. 10, lines 56-60).

Using a CCD as a photosensitive surface instead of photographic film is advantageous because it allows images to be captured electronically. For this reason, it would have been obvious to include an image sensor such as a CCD as taught in Yahav in the photometric apparatus disclosed by Takagi. Doing so would provide a means for controlling the flash emission of a camera using an alternate photosensitive surface such as a CCD (Yahav: col. 10, lines 56-60).

Claims 3, and 4 rejected under 35 U.S.C. 103(a) as being unpatentable over Takagi in view of Yahav and further in view of Ogawa US 5,678,079.

Re claim 3, Takagi in view of Yahav includes all of the limitations of claim 2. However, Takagi in view of Yahav does not state that the controller determines an average value for the light measuring elements to set a standard value, and selects the light measuring elements that are less than the standard value.

Ogawa discloses a photometric device with a controller (fig. 3). The controller includes a standard value determining section (fig. 3: 44) which calculates a reference photometric value by performing a predetermined specified weighting addition of each photometric value (col. 3, lines 60-64). Setting a standard value of the light measuring elements is advantageous because it allows the controller to select values that are in a specified range. For this reason, it would have been obvious to include a standard value determining section as taught in Ogawa in the photometric apparatus disclosed by

Takagi in view of Yahav. Doing so would provide a means for displaying an exposure deviation using the effective photometric value and the reference photometric value (Ogawa: col. 3, line 65- col. 4, line 30).

Re claim 4, see claim 3. The standard value determining section (44) calculates a reference photometric value (col. 3, lines 60-64). This reference photometric value can be calculated as an average of all of the photometric values in the field (col. 5, lines 28-37). Therefore the standard value is equal to the determined average value.

Claim 11 rejected under 35 U.S.C. 103(a) as being unpatentable over Takagi in view of Yahav and further in view of Kazumi et al. US 5,621,494.

Re claim 11, Takagi in view of Yahav includes all of the limitations of claim 8. However, Takagi in view of Yahav does not state that a diffusion plate is disposed on the photoreceptive surface of the light-measuring element.

Kazumi discloses a camera having a light-source determining function (fig. 1). The camera includes a light-measuring sensor (fig. 1: S1) that detects a light source, and a white diffusing plate (fig. 1: 13). See also (col. 5, lines 37-40). Therefore, it would have been obvious to include diffusion plate as taught in Kazumi in the photometric apparatus disclosed by Takagi in view of Yahav. Doing so would provide a means for detecting a light source using a diffusion plate that cooperates with a light measuring sensor (col. 5, lines 37-43).

Allowable Subject Matter

Claims 9,10, and 12-15 objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Contacts

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kelly L. Jerabek whose telephone number is 703-305-8659. The examiner can normally be reached on Monday - Friday (8:00 AM - 5:00 PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wendy Garber can be reached on 703-305-4929. The fax phone number for submitting all Official communications is 703-872-9306. The fax phone number for submitting informal communications such as drafts, proposed amendments, etc., may be faxed directly to the Examiner at 703-746-3059.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

KLJ


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PRIMARY EXAMINER